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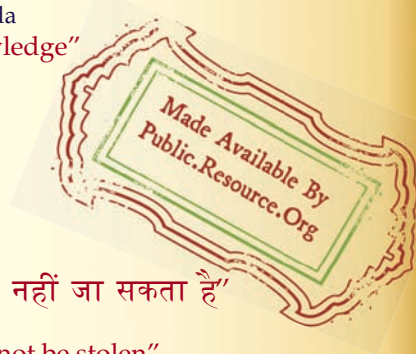
IS 3689 (1966): Conversion factors and conversion tables  
for yarn counts [TXD 1: Physical Methods of Tests]



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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*Indian Standard*  
CONVERSION FACTORS  
AND CONVERSION TABLES FOR  
YARN COUNTS  
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**BUREAU OF INDIAN STANDARDS**  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

# Indian Standard

## CONVERSION FACTORS AND CONVERSION TABLES FOR YARN COUNTS

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*Indian Standard*  
**CONVERSION FACTORS  
AND CONVERSION TABLES FOR  
YARN COUNTS**

**0. FOREWORD**

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 11 July 1966, after the draft finalized by the Textile Standards Sectional Committee had been approved by the Textile Division Council.

**0.2** A variety of count systems is being used in the different sectors of the textile industry. With the increasing complexity to be found in industrial and commercial fields, there is an ever-growing need for standardization of count systems. Further, with the growing use of yarns containing more than one kind of fibre and of fabrics containing yarns made from different fibres, it has become increasingly evident that the adoption of a single yarn count system would avoid confusion and save time. With this end in view, the Technical Committee, TC 38, of the International Organization for Standardization agreed unanimously to recommend the Tex System for international adoption in place of the various traditional count systems. Tex System is a direct system based on metric units and suitable for application to structures like fibre, yarn, cord and rope, and made of any textile material like cotton, silk, wool, man-made fibres, jute or their blends. The universal count in tex is obtained by dividing the mass in grams of a given length of yarn by its length in kilometres. To avoid small fractions and large numbers, sub-multiple and multiple units recommended in preference to other possible combinations, are milligrams per kilometre named 'millitex' and kilograms per kilometre or grams per metre named 'kilotex'.

**0.3** With the introduction of metric system in India, certain sectors of the textile industry are planning to adopt the Tex System. It has, therefore, become necessary to formulate this standard which defines the various count systems and provides factors and tables for conversion of values in traditional count system and Tex System.

**0.4** In the preparation of this standard, considerable assistance has been derived from ISO/R 271-1962 'Implementation of Tex System for designating the size of textile fibres, yarns and similar structures', issued by the International Organization for Standardization.

**0.5** For the conversion of basic foot-pound units, reference may be made to IS : 786-1956\*.

**0.6** The values given in Tables 4 to 12 have been rounded off according to IS : 2-1960†, to the number of significant figures given below:

VALUE RANGE		ROUNDED OFF TO
From ( Including )	Up to ( Excluding )	
0	100	3 significant figures
100	1 000	4 significant figures
1 000 and above		Nearest integral number

## 1. SCOPE

**1.1** This standard defines the various count systems and provides factors and formulae for inter-conversion of yarn counts. Tables for inter-conversion of values in traditional count systems and Tex System are also included in this standard.

**1.2** The procedure for obtaining rounded values of tex based on ISO/R 271-1962 ' Implementation of Tex System for designating the size of textile fibres, yarns and similar structures ' has been given in Appendices A and B.

## 2. DEFINITIONS

**2.1 Direct System** — The count system in which the size of the yarn is expressed in terms of the mass of yarn per unit length.

**2.2 Indirect System** — The count system in which the size of the yarn is expressed in terms of the length of yarn per unit mass.

## 3. CONVERSION FACTORS

**TABLE 1 CONVERSION FACTORS FOR DIRECT SYSTEMS AND TEX**

SL No.	YARN COUNT SYSTEM	SYM-BOLIC ABBREVIATION	UNIT OF MASS USED	UNIT OF LENGTH USED	UNIT OF YARN COUNT	CONVERSION FACTORS	
						To Other Yarn Counts from Tex	To Tex from Other Yarn Counts
i)	Tex	$T_t$	1 g	1 000 m	g/1 000 m	—	—
ii)	Denier	$T_d$	1 g	9 000 m	g/9 000 m	$T_d = 9 T_t$	$T_t = 0.1111 T_d$
iii)	Grist [Jute, Hemp, Linen (dry spun) ]	$T_j$	1 lb	14 400 yd (spindle unit)	lb/14 400 yd	$T_j = 0.029 03 T_t$	$T_t = 34.45 T_j$

\*Conversion factors and conversion tables.

†Rules for rounding off numerical values (*revised*).



TABLE 2 CONVERSION FACTORS FOR INDIRECT SYSTEMS AND TEX

SL No.	YARN COUNT SYSTEM	SYMBOLIC ABBRE- VIATION	UNIT OF LENGTH USED	UNIT OF MASS USED	UNIT OF YARN COUNT	CONVERSION FACTORS	
						To Other Yarn Counts from Tex	To Tex from Other Yarn Counts
i)	Cotton count (spun-rayon staple, spun silk)	$N_c C$	840 yd (hank)	1 lb	840 yd/lb	$N_c = \frac{590.5}{T_t}$	$T_t = \frac{590.5}{N_c C}$
ii)	Linen (wet spun)	$N_e L$	300 yd (lea)	1 lb	300 yd/lb	$N_e L = \frac{1\,654}{T_t}$	$T_t = \frac{1\,654}{N_e L}$
iii)	Metric (cotton and wool)	$N_m$	1 000 m (hank)	1 kg	1 000 m/kg	$N_m = \frac{1\,000}{T_t}$	$T_t = \frac{1\,000}{N_m}$
iv)	Woollen (Dewsbury)	$N_d$	1 yd	1 oz	yd/oz	$N_d = \frac{31\,000}{T_t}$	$T_t = \frac{31\,000}{N_d}$
v)	Woollen (Yorkshire)	$N_y$	256 yd (skein)	1 lb	256 yd/lb	$N_y = \frac{1\,938}{T_t}$	$T_t = \frac{1\,938}{N_y}$
vi)	Worsted	$N_w W$	560 yd (hank)	1 lb	560 yd/lb	$N_w W = \frac{885.8}{T_t}$	$T_t = \frac{885.8}{N_w W}$

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TABLE 3 CONVERSION FORMULAE FOR INTER-CONVERSION OF YARN COUNTS

YARN COUNTS	TEX ( $T_t$ )	DENIER ( $T_d$ )	GRIST [JUTE, LINEN (DRY SPUN), HEMP] ( $T_j$ )	COTTON COUNT (SPUN-RAYON STAPLE, SPUN SILK) ( $N_{eC}$ )	LINEN (WET SPUN) ( $N_{eL}$ )	METRIC ( $N_m$ )	WOOLLEN (DEWSBURY) ( $N_d$ )	WOOLLEN (YORKSHIRE) ( $N_y$ )	WORSTED ( $N_{eW}$ )
	( Direct to Direct System )			( Direct to Indirect System )					
Tex ( $T_t$ )	$T_t$	$T_d = 9 \times T_t$	$T_j = 0.02903 \times T_t$	$N_{eC} = \frac{590.5}{T_t}$	$N_{eL} = \frac{1654}{T_t}$	$N_m = \frac{1000}{T_t}$	$N_d = \frac{31000}{T_t}$	$N_y = \frac{1938}{T_t}$	$N_{eW} = \frac{885.8}{T_t}$
Denier ( $T_d$ )	$T_t = 0.1111 \times T_d$	$T_d$	$T_j = 0.003225 \times T_d$	$N_{eC} = \frac{5315}{T_d}$	$N_{eL} = \frac{14880}{T_d}$	$N_m = \frac{9000}{T_d}$	$N_d = \frac{279000}{T_d}$	$N_y = \frac{17440}{T_d}$	$N_{eW} = \frac{7972}{T_d}$
Grist [Jute, Linen (dry spun), Hemp] ( $T_j$ )	$T_t = 34.45 \times T_j$	$T_d = 310 \times T_j$	$T_j$	$N_{eC} = \frac{17.14}{T_j}$	$N_{eL} = \frac{48.00}{T_j}$	$N_m = \frac{29.03}{T_j}$	$N_d = \frac{899.9}{T_j}$	$N_y = \frac{56.25}{T_j}$	$N_{eW} = \frac{25.71}{T_j}$
	( Indirect to Direct System )			( Indirect to Indirect System )					
Cotton Count (spun-rayon staple, spun silk) ( $N_{eC}$ )	$T_t = \frac{590.5}{N_{eC}}$	$T_d = \frac{5315}{N_{eC}}$	$T_j = \frac{17.14}{N_{eC}}$	$N_{eC}$	$N_{eL} = 2.80 \times N_{eC}$	$N_m = 1.693 \times N_{eC}$	$N_d = 52.50 \times N_{eC}$	$N_y = 3.281 \times N_{eC}$	$N_{eW} = 1.50 \times N_{eC}$
Linen (wet spun) ( $N_{eL}$ )	$T_t = \frac{1654}{N_{eL}}$	$T_d = \frac{14880}{N_{eL}}$	$T_j = \frac{48.00}{N_{eL}}$	$N_{eC} = 0.3571 \times N_{eL}$	$N_{eL}$	$N_m = 0.6048 \times N_{eL}$	$N_d = 18.74 \times N_{eL}$	$N_y = 1.172 \times N_{eL}$	$N_{eW} = 0.5357 \times N_{eL}$
Metric ( $N_m$ )	$T_t = \frac{1000}{N_m}$	$T_d = \frac{9000}{N_m}$	$T_j = \frac{29.03}{N_m}$	$N_{eC} = 0.5905 \times N_m$	$N_{eL} = 1.654 \times N_m$	$N_m$	$N_d = 31.00 \times N_m$	$N_y = 1.938 \times N_m$	$N_{eW} = 0.8858 \times N_m$
Woollen (Dewsbury) ( $N_d$ )	$T_t = \frac{31000}{N_d}$	$T_d = \frac{279000}{N_d}$	$T_j = \frac{899.9}{N_d}$	$N_{eC} = 0.01905 \times N_d$	$N_{eL} = 0.05335 \times N_d$	$N_m = 0.03226 \times N_d$	$N_d$	$N_y = 0.06252 \times N_d$	$N_{eW} = 0.02857 \times N_d$
Woollen (Yorkshire) ( $N_y$ )	$T_t = \frac{1938}{N_y}$	$T_d = \frac{17440}{N_y}$	$T_j = \frac{56.25}{N_y}$	$N_{eC} = 0.3048 \times N_y$	$N_{eL} = 0.8533 \times N_y$	$N_m = 0.5161 \times N_y$	$N_d = 16.00 \times N_y$	$N_y$	$N_{eW} = 0.4571 \times N_y$
Worsted ( $N_{eW}$ )	$T_t = \frac{885.8}{N_{eW}}$	$T_d = \frac{7972}{N_{eW}}$	$T_j = \frac{25.71}{N_{eW}}$	$N_{eC} = 0.6667 \times N_{eW}$	$N_{eL} = 1.867 \times N_{eW}$	$N_m = 1.129 \times N_{eW}$	$N_d = 35.00 \times N_{eW}$	$N_y = 2.188 \times N_{eW}$	$N_{eW}$

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## 4. CONVERSION TABLES

TABLE 4 COTTON COUNT (SPUN-RAYON STAPLE, SPUN SILK) ( $N_c$ ) TO TEX ( $T_t$ )

$$\text{Tex} = \frac{590.5}{\text{Cotton Count}}$$

COTTON COUNT	0	1	2	3	4	5	6	7	8	9
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	590.5	295.3	196.8	147.6	118.1	98.4	84.4	73.8	65.6
10	59.0	53.7	49.2	45.4	42.2	39.4	36.9	34.7	32.8	31.1
20	29.5	28.1	26.8	25.7	24.6	23.6	22.7	21.9	21.1	20.4
30	19.7	19.0	18.4	17.9	17.4	16.9	16.4	16.0	15.5	15.1
40	14.8	14.4	14.1	13.7	13.4	13.1	12.8	12.6	12.3	12.1
50	11.8	11.6	11.4	11.1	10.9	10.7	10.5	10.4	10.2	10.0
60	9.84	9.68	9.52	9.37	9.23	9.09	8.95	8.81	8.68	8.56
70	8.44	8.32	8.20	8.09	7.98	7.87	7.77	7.67	7.57	7.48
80	7.38	7.29	7.20	7.11	7.03	6.95	6.87	6.79	6.71	6.64
90	6.56	6.49	6.42	6.35	6.28	6.22	6.15	6.09	6.03	5.96
100	5.91	5.85	5.79	5.73	5.68	5.62	5.57	5.52	5.47	5.42
110	5.37	5.32	5.27	5.23	5.18	5.14	5.09	5.05	5.00	4.96
120	4.92									

TABLE 5 DENIER ( $T_d$ ) TO TEX ( $T_t$ )

$$\text{Tex} = 0.1111 \times \text{Denier}$$

DENIER	0	1	2	3	4	5	6	7	8	9
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	0.111	0.222	0.333	0.444	0.556	0.667	0.778	0.889	1.00
10	1.11	1.22	1.33	1.44	1.56	1.67	1.78	1.89	2.00	2.11
20	2.22	2.33	2.44	2.56	2.67	2.78	2.89	3.00	3.11	3.22
30	3.33	3.44	3.56	3.67	3.78	3.89	4.00	4.11	4.22	4.33
40	4.44	4.56	4.67	4.78	4.89	5.00	5.11	5.22	5.33	5.44
50	5.56	5.67	5.78	5.89	6.00	6.11	6.22	6.33	6.44	6.56
60	6.67	6.78	6.89	7.00	7.11	7.22	7.33	7.44	7.56	7.67
70	7.78	7.89	8.00	8.11	8.22	8.33	8.44	8.56	8.67	8.78
80	8.89	9.00	9.11	9.22	9.33	9.44	9.56	9.67	9.78	9.89
90	10.0	10.1	10.2	10.3	10.4	10.6	10.7	10.8	10.9	11.0
100	11.1									

TABLE 6 GRIST (  $T_g$  ) TO TEX (  $T_t$  )

$$\text{Tex} = 34.45 \times \text{Grist}$$

GRIST	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	17.2	34.4	51.7	68.9	86.1	103.3	120.6	137.8	155.0
5	172.2	189.4	206.7	223.9	241.1	258.4	275.6	292.8	310.0	327.3
10	344.5	361.7	378.9	396.1	413.3	430.6	447.8	465.0	482.3	500.0
15	516.7	534.0	551.2	568.4	585.6	602.8	620.1	637.3	654.5	671.7
20	689.0	706.2	723.4	740.6	757.9	775.1	792.3	809.5	826.8	844.0
25	861.2	878.4	895.6	912.8	930.1	947.3	964.6	981.8	999.0	1 016.2
30	1 033									

TABLE 7 LINEN COUNT (  $N_{L}$  ) TO TEX (  $T_t$  )

$$\text{Tex} = \frac{1\ 654}{\text{Linen Count}}$$

LINEN COUNT	0	1	2	3	4	5	6	7	8	9
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	1 654	826.8	551.2	413.4	330.7	275.6	236.2	206.7	183.7
10	165.4	150.3	137.8	127.2	118.1	110.2	103.3	97.3	91.9	87.0
20	82.7	78.7	75.2	71.9	68.9	66.1	63.6	61.2	59.1	57.0
30	55.1	53.3	51.7	50.1	48.6	47.2	45.9	44.7	43.5	42.4
40	41.3	40.3	39.4	38.5	37.6	36.7	35.9	35.2	34.4	33.7
50	33.1	32.4	31.8	31.2	30.6	30.1	29.5	29.0	28.5	28.0
60	27.6	27.1	26.7	26.2	25.8	25.4	25.1	24.7	24.3	24.0
70	23.6	23.3	23.0	22.7	22.3	22.0	21.8	21.5	21.2	20.9
80	20.7	20.4	20.2	19.9	19.7	19.5	19.2	19.0	18.8	18.6
90	18.4	18.2	18.0	17.8	17.6	17.4	17.2	17.0	16.9	16.7
100	16.5	16.4	16.2	16.1	15.9	15.7	15.6	15.5	15.3	15.2
110	15.0	14.9	14.8	14.6	14.5	14.4	14.3	14.1	14.0	13.9
120	13.8									

TABLE 8 METRIC COUNT (  $N_m$  ) TO TEX (  $T_t$  )

$$\text{Tex} = \frac{1\,000}{\text{Metric Count}}$$

METRIC COUNT	0	1	2	3	4	5	6	7	8	9
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	1 000	500.0	333.3	250.0	200.0	166.7	142.8	125.0	111.1
10	100.0	90.9	83.3	76.9	71.4	66.7	62.5	58.8	55.6	52.6
20	50.0	47.6	45.4	43.5	41.7	40.0	38.5	37.0	35.7	34.5
30	33.3	32.3	31.2	30.3	29.4	28.6	27.8	27.0	26.3	25.6
40	25.0	24.4	23.8	23.3	22.7	22.2	21.7	21.3	20.8	20.4
50	20.0	19.6	19.2	18.9	18.5	18.2	17.9	17.5	17.2	17.0
60	16.7	16.4	16.1	15.9	15.6	15.4	15.2	14.9	14.7	14.5
70	14.3	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	12.7
80	12.5	12.3	12.2	12.0	11.9	11.8	11.6	11.5	11.4	11.2
90	11.1	11.0	10.9	10.8	10.6	10.5	10.4	10.3	10.2	10.1
100	10.0									

TABLE 9 WOOLLEN (DEWSBURY) ( $N_d$ ) TO TEX ( $T_t$ )

$$\text{Tex} = \frac{31\,000}{\text{Woollen Count (Dewsbury)}}$$

WOOLLEN COUNT	0	1	2	3	4	5	6	7	8	9
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	31 000	15 500	10 333	7 750	6 200	5 167	4 428	3 875	3 444
10	3 100	2 818	2 583	2 385	2 214	2 067	1 938	1 824	1 722	1 632
20	1 550	1 476	1 409	1 348	1 292	1 240	1 192	1 148	1 107	1 069
30	1 033	1 000	968.8	939.4	911.8	885.7	861.1	837.8	815.8	794.9
40	775.0	756.1	738.1	720.9	704.5	688.9	673.9	659.6	645.8	632.6
50	620.0	607.8	596.2	584.9	574.1	563.6	553.6	543.8	534.5	525.4
60	516.7	508.2	500.0	492.1	484.4	476.9	469.7	462.7	455.9	449.3
70	442.8	436.6	430.6	424.6	418.9	413.3	407.9	402.6	397.4	392.4
80	387.5	382.7	378.0	373.5	369.0	364.7	360.5	356.3	352.3	348.3
90	344.4	340.6	337.0	333.3	329.8	326.3	322.9	319.6	316.3	313.1
100	310.0									



TABLE 10 WOOLLEN ( YORKSHIRE ) (  $N_y$  ) TO TEX (  $T_t$  )

$$\text{Tex} = \frac{1\ 938}{\text{Woollen Count (Yorkshire)}}$$

WOOLLEN COUNT	0	1	2	3	4	5	6	7	8	9
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	1938	968.9	645.9	484.4	387.5	323.0	276.8	242.2	215.3
10	193.8	176.2	161.5	149.1	138.4	129.2	121.1	114.0	107.6	102.0
20	96.9	92.3	88.1	84.2	80.7	77.5	74.5	71.8	69.2	66.8
30	64.6	62.5	60.6	58.7	56.9	55.4	53.8	52.4	50.9	49.7
40	48.4	47.3	46.1	45.1	44.0	43.1	42.1	41.2	40.4	39.5
50	38.8	37.9	37.3	36.6	35.9	35.2	34.6	33.9	33.4	32.8
60	32.3									

TABLE 11 WORSTED (  $N_w$  ) TO TEX (  $T_t$  )

$$\text{Tex} = \frac{885.8}{\text{Worsted Count}}$$

WORSTED COUNT	0	1	2	3	4	5	6	7	8	9
	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex	Tex
0	0	885.8	442.9	295.3	221.5	177.2	147.6	126.5	110.7	98.4
10	88.6	80.5	73.8	68.1	63.3	59.1	55.4	52.1	49.2	46.6
20	44.3	42.2	40.3	38.5	36.9	35.4	34.1	32.8	31.6	30.6
30	29.5	28.6	27.7	26.8	26.0	25.3	24.6	23.9	23.3	22.7
40	22.1	21.6	21.1	20.6	20.1	19.7	19.3	18.8	18.5	18.1
50	17.7	17.4	17.0	16.7	16.4	16.1	15.8	15.5	15.3	15.0
60	14.8	14.5	14.3	14.1	13.8	13.6	13.4	13.2	13.0	12.8
70	12.6	12.5	12.3	12.1	12.0	11.8	11.7	11.5	11.4	11.2
80	11.1									

TABLE 12 TEX TO OTHER COUNT SYSTEMS

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_t^C$ )	( $T_d$ )	( $T_j$ )	( $N_{tL}$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_{tw}$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	590.5	9.00	0.029	1 654	1 000	31 000	1 938	885.8
2	295.2	18.0	0.058	826.8	500.0	15 500	968.9	442.9
3	196.8	27.0	0.087	551.2	333.3	10 333	645.9	295.3
4	147.6	36.0	0.116	413.4	250.0	7 750	484.4	221.5
5	118.1	45.0	0.145	330.7	200.0	6 200	387.5	177.2
6	98.4	54.0	0.174	275.6	166.7	5 167	323.0	147.6
7	84.4	63.0	0.203	236.2	142.9	4 428	276.8	126.5
8	73.8	72.0	0.232	206.7	125.0	3 875	242.2	110.7
9	65.6	81.0	0.261	183.7	111.1	3 444	215.3	98.5
10	59.0	90.0	0.290	165.4	100.0	3 100	193.8	88.6
11	53.7	99.0	0.319	150.3	90.9	2 818	176.2	80.5
12	49.2	108.0	0.348	137.8	83.3	2 583	161.5	73.8
13	45.4	117.0	0.377	127.2	76.9	2 385	149.1	68.1
14	42.2	126.0	0.406	118.1	71.4	2 214	138.4	63.3
15	39.4	135.0	0.435	110.2	66.6	2 067	129.2	59.0
16	36.9	144.0	0.464	103.3	62.5	1 938	121.1	55.4
17	34.7	153.0	0.494	97.3	58.8	1 824	114.0	52.1
18	32.8	162.0	0.523	91.9	55.5	1 722	107.7	49.2
19	31.1	171.0	0.552	87.0	52.6	1 632	102.0	46.6
20	29.5	180.0	0.581	82.7	50.0	1 550	96.9	44.3
21	28.1	189.0	0.610	78.7	47.6	1 476	92.3	42.2
22	26.8	198.0	0.639	75.2	45.4	1 409	88.1	40.3
23	25.7	207.0	0.668	71.9	43.5	1 348	84.2	38.5
24	24.6	216.0	0.697	68.9	41.7	1 292	80.7	36.9
25	23.6	225.0	0.726	66.1	40.0	1 240	77.5	35.4
26	22.7	234.0	0.755	63.6	38.5	1 192	74.5	34.1
27	21.9	243.0	0.784	61.2	37.0	1 148	71.8	32.8
28	21.1	252.0	0.813	59.1	35.7	1 107	69.2	31.6
29	20.4	261.0	0.842	57.0	34.5	1 069	66.8	30.6
30	19.7	270.0	0.871	55.1	33.3	1 033	64.6	29.5
31	19.0	279.0	0.900	53.3	32.3	1 000	62.5	28.6
32	18.4	288.0	0.929	51.7	31.2	968.8	60.6	27.7
33	17.9	297.0	0.958	50.1	30.3	939.4	58.7	26.8
34	17.4	306.0	0.987	48.6	29.4	921.8	56.9	26.0
35	16.9	315.0	1.02	47.2	28.6	885.7	55.4	25.3
36	16.4	324.0	1.04	45.9	27.8	861.1	53.8	24.6
37	16.0	333.0	1.07	44.7	27.0	837.8	52.4	23.9
38	15.5	342.0	1.10	43.5	26.3	815.8	50.9	23.3
39	15.1	351.0	1.13	42.4	25.6	794.9	49.7	22.7
40	14.8	360.0	1.16	41.3	25.0	775.0	48.4	22.2

(Continued)

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_c$ )	( $T_d$ )	( $T_g$ )	( $N_L$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_w$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
41	14.4	369.0	1.19	40.3	24.4	756.1	47.3	21.6
42	14.1	378.0	1.22	39.4	23.8	738.1	46.1	21.1
43	13.7	387.0	1.25	38.5	23.2	720.9	45.1	20.6
44	13.4	396.0	1.28	37.6	22.7	704.5	44.0	20.1
45	13.1	405.0	1.31	36.7	22.2	688.9	43.1	19.7
46	12.8	414.0	1.34	35.9	21.7	673.9	42.1	19.3
47	12.6	423.0	1.36	35.2	21.3	659.6	41.2	18.8
48	12.3	432.0	1.39	34.4	20.8	645.8	40.4	18.4
49	12.0	441.0	1.42	33.7	20.4	632.6	39.5	18.1
50	11.8	450.0	1.45	33.1	20.0	620.0	38.8	17.7
51	11.6	459.0	1.48	32.4	19.6	607.8	37.9	17.4
52	11.4	468.0	1.51	31.8	19.2	596.2	37.3	17.0
53	11.1	477.0	1.54	31.2	18.9	584.9	36.6	16.7
54	10.9	486.0	1.57	30.6	18.5	574.1	35.9	16.4
55	10.7	495.0	1.60	30.1	18.2	563.6	35.2	16.1
56	10.5	504.0	1.63	29.5	17.8	553.6	34.6	15.8
57	10.4	513.0	1.65	29.0	17.5	543.8	33.9	15.5
58	10.2	522.0	1.68	28.5	17.2	534.5	33.4	15.3
59	10.0	531.0	1.71	28.0	16.9	525.4	32.8	15.0
60	9.84	540.0	1.74	27.6	16.6	516.7	32.3	14.8
61	9.68	549.0	1.77	27.1	16.4	508.2	31.8	14.5
62	9.52	558.0	1.80	26.7	16.1	500.0	31.3	14.3
63	9.37	567.0	1.83	26.2	15.9	492.1	30.8	14.1
64	9.23	576.0	1.86	25.8	15.6	484.4	30.3	13.8
65	9.09	585.0	1.89	25.4	15.4	476.9	29.8	13.6
66	8.95	594.0	1.92	25.1	15.2	469.7	29.4	13.4
67	8.81	603.0	1.94	24.7	14.9	462.7	28.9	13.2
68	8.68	612.0	1.97	24.3	14.7	455.9	28.5	13.0
69	8.56	621.0	2.00	24.0	14.5	449.3	28.1	12.8
70	8.44	630.0	2.03	23.6	14.3	442.8	27.7	12.6
71	8.32	639.0	2.06	23.3	14.1	436.6	27.3	12.5
72	8.20	648.0	2.09	23.0	13.9	430.6	26.9	12.3
73	8.09	657.0	2.12	22.7	13.7	424.6	26.5	12.1
74	7.98	666.0	2.15	22.3	13.5	418.9	26.2	11.9
75	7.87	675.0	2.18	22.0	13.3	413.3	25.8	11.8
76	7.77	684.0	2.21	21.8	13.2	407.9	25.5	11.7
77	7.67	693.0	2.24	21.5	13.0	402.6	25.2	11.5
78	7.57	702.0	2.26	21.2	12.8	392.4	24.8	11.4
79	7.48	711.0	2.29	20.9	12.6	393.4	24.5	11.2
80	7.38	720.0	2.32	20.7	12.5	387.5	24.2	11.1

(Continued)

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DREWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_{cC}$ )	( $T_d$ )	( $T_f$ )	( $N_{eL}$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_{eW}$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
81	7.29	729.0	2.35	20.4	12.3	382.7	23.9	10.9
82	7.20	738.0	2.38	20.2	12.2	378.0	23.6	10.8
83	7.11	747.0	2.41	19.9	12.0	373.5	23.3	10.7
84	7.03	756.0	2.44	19.7	11.9	369.0	23.1	10.5
85	6.95	765.0	2.47	19.5	11.8	364.7	22.8	10.4
86	6.87	774.0	2.50	19.2	11.6	360.5	22.5	10.3
87	6.79	783.0	2.53	19.0	11.5	356.3	22.3	10.2
88	6.71	792.0	2.55	18.8	11.4	352.3	22.0	10.1
89	6.64	801.0	2.58	18.6	11.2	348.3	21.8	10.0
90	6.56	810.0	2.61	18.4	11.1	344.4	21.5	9.84
91	6.49	819.0	2.64	18.2	11.0	340.6	21.3	9.73
92	6.42	828.0	2.67	18.0	10.9	337.0	21.1	9.63
93	6.35	837.0	2.70	17.8	10.8	333.3	20.8	9.52
94	6.28	846.0	2.73	17.6	10.6	329.8	20.6	9.42
95	6.22	855.0	2.76	17.4	10.5	326.3	20.4	9.32
96	6.15	864.0	2.79	17.2	10.4	322.9	20.2	9.23
97	6.09	873.0	2.82	17.0	10.3	319.6	20.0	9.13
98	6.03	882.0	2.84	16.9	10.2	316.3	19.8	9.04
99	5.97	891.0	2.87	16.7	10.1	313.1	19.6	8.95
100	5.91	900.0	2.90	16.5	10.0	310.0	19.4	8.86
105	5.62	945.0	3.05	15.7	9.52	295.2	18.5	8.44
110	5.37	990.0	3.19	15.0	9.09	281.8	17.6	8.05
115	5.14	1 035	3.34	14.4	8.70	269.6	16.9	7.70
120	4.92	1 080	3.48	13.8	8.33	258.3	16.1	7.38
125	4.72	1 125	3.63	13.2	8.00	248.0	15.5	7.09
130	4.54	1 170	3.77	12.7	7.69	238.5	14.9	6.81
135	4.37	1 215	3.92	12.2	7.41	229.6	14.4	6.56
140	4.22	1 260	4.06	11.8	7.14	221.4	13.8	6.33
145	4.07	1 305	4.21	11.4	6.90	213.8	13.4	6.11
150	3.94	1 350	4.35	11.0	6.66	206.7	12.9	5.90
155	3.81	1 395	4.50	10.7	6.45	200.0	12.5	5.71
160	3.69	1 440	4.64	10.3	6.25	193.8	12.1	5.54
165	3.58	1 485	4.79	10.0	6.06	187.9	11.7	5.37
170	3.47	1 530	4.93	9.73	5.88	182.4	11.4	5.21
175	3.37	1 575	5.08	9.45	5.71	177.1	11.1	5.06
180	3.28	1 620	5.23	9.19	5.55	172.2	10.8	4.92
185	3.19	1 665	5.37	8.94	5.41	167.6	10.5	4.79
190	3.11	1 710	5.52	8.70	5.26	163.2	10.2	4.66
195	3.03	1 755	5.66	8.48	5.13	159.0	9.94	4.54
200	2.95	1 800	5.81	8.27	5.00	155.0	9.69	4.43

(Continued)

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_c$ )	( $T_d$ )	( $T_g$ )	( $N_L$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_w$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
205	2.88	1 845	5.95	8.07	4.88	151.2	9.45	4.32
210	2.81	1 890	6.10	7.87	4.76	147.6	9.23	4.22
215	2.75	1 935	6.24	7.69	4.65	144.2	9.01	4.12
220	2.68	1 980	6.39	7.52	4.54	140.9	8.81	4.03
225	2.62	2 025	6.53	7.35	4.44	137.8	8.61	3.94
230	2.57	2 070	6.68	7.19	4.35	134.8	8.42	3.85
235	2.51	2 115	6.82	7.04	4.26	131.9	8.25	3.77
240	2.46	2 160	6.97	6.89	4.17	129.2	8.07	3.69
245	2.41	2 205	7.11	6.75	4.08	126.5	7.91	3.62
250	2.36	2 250	7.26	6.61	4.00	124.0	7.75	3.54
255	2.32	2 295	7.40	6.49	3.92	121.6	7.60	3.47
260	2.27	2 340	7.55	6.36	3.85	119.2	7.45	3.41
265	2.23	2 385	7.69	6.25	3.77	117.0	7.31	3.34
270	2.19	2 430	7.84	6.12	3.70	114.8	7.18	3.28
275	2.15	2 475	7.98	6.01	3.64	112.7	7.05	3.22
280	2.11	2 520	8.13	5.91	3.57	110.7	6.92	3.16
285	2.07	2 565	8.27	5.80	3.51	108.8	6.80	3.11
290	2.04	2 610	8.42	5.70	3.45	106.9	6.68	3.06
295	2.00	2 655	8.56	5.61	3.39	105.0	6.57	3.00
300	1.97	2 700	8.71	5.51	3.33	103.3	6.46	2.95
305	1.94	2 745	8.85	5.42	3.28	101.6	6.35	2.90
310	1.90	2 790	9.00	5.33	3.23	100.0	6.25	2.86
315	1.87	2 835	9.14	5.25	3.17	98.4	6.15	2.81
320	1.84	2 880	9.29	5.17	3.12	96.9	6.06	2.77
325	1.82	2 925	9.43	5.09	3.08	95.4	5.96	2.73
330	1.79	2 970	9.58	5.01	3.03	93.9	5.87	2.68
335	1.76	3 015	9.72	4.94	2.99	92.5	5.79	2.64
340	1.74	3 060	9.87	4.86	2.94	92.2	5.69	2.60
345	1.71	3 105	10.0	4.79	2.90	89.9	5.62	2.57
350	1.69	3 150	10.2	4.72	2.86	88.6	5.54	2.53
355	1.66	3 195	10.3	4.66	2.82	87.3	5.46	2.50
360	1.64	3 240	10.5	4.59	2.78	86.1	5.38	2.46
365	1.62	3 285	10.6	4.53	2.74	84.9	5.31	2.43
370	1.60	3 330	10.7	4.47	2.70	83.8	5.24	2.39
375	1.57	3 375	10.9	4.41	2.67	82.7	5.17	2.36
380	1.55	3 420	11.0	4.35	2.63	81.6	5.09	2.33
385	1.53	3 465	11.2	4.30	2.60	80.5	5.03	2.30
390	1.51	3 510	11.3	4.24	2.56	79.5	4.97	2.27
395	1.49	3 555	11.4	4.19	2.53	78.5	4.91	2.24
400	1.48	3 600	11.6	4.13	2.50	77.5	4.84	2.22

(Continued)

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_c$ )	( $T_d$ )	( $T_g$ )	( $N_L$ )	( $N_m$ )	( $N_d$ )	( $N_g$ )	( $N_w$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
405	1.46	3 645	11.8	4.08	2.47	76.5	4.79	2.19
410	1.44	3 690	11.9	4.03	2.44	75.6	4.73	2.16
415	1.42	3 735	12.0	3.99	2.41	74.7	4.67	2.13
420	1.41	3 780	12.2	3.94	2.38	73.8	4.61	2.11
425	1.39	3 825	12.3	3.89	2.35	72.9	4.56	2.08
430	1.37	3 870	12.5	3.85	2.32	72.1	4.51	2.06
435	1.36	3 915	12.6	3.80	2.30	71.3	4.46	2.04
440	1.34	3 960	12.8	3.76	2.27	70.4	4.40	2.01
445	1.33	4 005	12.9	3.72	2.25	69.7	4.36	1.99
450	1.31	4 050	13.1	3.67	2.22	68.9	4.31	1.97
455	1.30	4 095	13.2	3.64	2.20	68.1	4.26	1.95
460	1.28	4 140	13.4	3.59	2.17	67.4	4.21	1.93
465	1.27	4 185	13.5	3.56	2.15	66.7	4.17	1.90
470	1.26	4 230	13.6	3.52	2.13	66.0	4.12	1.88
475	1.24	4 275	13.8	3.48	2.11	65.3	4.08	1.86
480	1.23	4 320	13.9	3.44	2.08	64.6	4.04	1.84
485	1.22	4 365	14.1	3.41	2.06	63.9	4.00	1.83
490	1.20	4 410	14.2	3.37	2.04	63.3	3.95	1.81
495	1.19	4 455	14.4	3.34	2.02	62.6	3.92	1.79
500	1.18	4 500	14.5	3.31	2.00	62.0	3.88	1.77
505	1.17	4 545	14.7	3.28	1.98	61.4	3.84	1.75
510	1.16	4 590	14.8	3.24	1.96	60.8	3.79	1.74
515	1.15	4 635	15.0	3.21	1.94	60.2	3.76	1.72
520	1.14	4 680	15.1	3.18	1.92	59.6	3.73	1.70
525	1.12	4 725	15.2	3.15	1.90	59.0	3.69	1.69
530	1.11	4 770	15.4	3.12	1.89	58.5	3.66	1.67
535	1.10	4 815	15.5	3.09	1.87	57.9	3.62	1.66
540	1.09	4 860	15.7	3.06	1.85	57.4	3.59	1.64
545	1.08	4 905	15.8	3.03	1.83	56.9	3.56	1.63
550	1.07	4 950	16.0	3.01	1.82	56.4	3.52	1.61
555	1.06	4 995	16.1	2.98	1.80	55.9	3.49	1.60
560	1.05	5 040	16.3	2.95	1.78	55.4	3.46	1.58
565	1.05	5 085	16.4	2.93	1.77	54.9	3.43	1.57
570	1.04	5 130	16.5	2.90	1.75	54.4	3.39	1.55
575	1.03	5 175	16.7	2.88	1.74	53.9	3.37	1.54
580	1.02	5 220	16.8	2.85	1.72	53.4	3.34	1.53
585	1.01	5 265	17.0	2.83	1.71	53.0	3.31	1.51
590	1.00	5 310	17.1	2.80	1.69	52.5	3.28	1.50
595	0.992	5 355	17.3	2.78	1.68	52.1	3.26	1.49
600	0.984	5 400	17.4	2.76	1.66	51.7	3.23	1.48

( *Continued* )

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_c$ )	( $T_d$ )	( $T_g$ )	( $N_L$ )	( $N_m$ )	( $N_d$ )	( $N_s$ )	( $N_{tW}$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
605	0.976	5 445	17.6	2.73	1.65	51.2	3.20	1.46
610	0.968	5 490	17.7	2.71	1.64	50.9	3.18	1.45
615	0.960	5 535	17.9	2.69	1.63	50.4	3.15	1.44
620	0.952	5 580	18.0	2.67	1.61	50.0	3.13	1.43
625	0.945	5 625	18.1	2.65	1.60	49.6	3.10	1.42
630	0.937	5 670	18.3	2.62	1.59	49.2	3.08	1.41
635	0.930	5 715	18.4	2.60	1.57	48.8	3.05	1.39
640	0.923	5 760	18.6	2.58	1.56	48.4	3.03	1.38
645	0.916	5 805	18.7	2.56	1.55	48.1	3.00	1.37
650	0.909	5 850	18.9	2.54	1.54	47.7	2.98	1.36
655	0.902	5 895	19.0	2.53	1.53	47.3	2.96	1.35
660	0.895	5 940	19.2	2.51	1.52	47.0	2.94	1.34
665	0.888	5 985	19.3	2.49	1.50	46.6	2.91	1.33
670	0.881	6 030	19.4	2.47	1.49	46.3	2.89	1.32
675	0.875	6 075	19.6	2.45	1.48	45.9	2.87	1.31
680	0.868	6 120	19.7	2.43	1.47	45.6	2.85	1.30
685	0.862	6 165	19.9	2.41	1.46	45.3	2.83	1.29
690	0.856	6 210	20.0	2.40	1.45	44.9	2.81	1.28
695	0.850	6 255	20.2	2.38	1.44	44.6	2.79	1.27
700	0.844	6 300	20.3	2.36	1.43	44.3	2.77	1.26
705	0.838	6 345	20.5	2.35	1.42	44.0	2.75	1.26
710	0.832	6 390	20.6	2.33	1.41	43.7	2.73	1.25
715	0.826	6 435	20.8	2.31	1.40	43.4	2.71	1.24
720	0.820	6 480	20.9	2.30	1.39	43.1	2.69	1.23
725	0.814	6 525	21.0	2.28	1.38	42.8	2.67	1.22
730	0.809	6 570	21.2	2.27	1.37	42.5	2.65	1.21
735	0.803	6 615	21.3	2.25	1.36	42.2	2.64	1.21
740	0.798	6 660	21.5	2.23	1.35	41.9	2.62	1.19
745	0.793	6 705	21.6	2.22	1.34	41.6	2.60	1.19
750	0.787	6 750	21.8	2.20	1.33	41.3	2.58	1.18
755	0.782	6 795	21.9	2.19	1.32	41.1	2.57	1.17
760	0.777	6 840	22.1	2.18	1.32	40.8	2.55	1.17
765	0.772	6 885	22.2	2.16	1.31	40.5	2.53	1.16
770	0.767	6 930	22.4	2.15	1.30	40.3	2.52	1.15
775	0.762	6 975	22.5	2.13	1.29	40.0	2.50	1.14
780	0.757	7 020	22.6	2.12	1.28	39.8	2.48	1.14
785	0.752	7 065	22.8	2.11	1.27	39.5	2.47	1.13
790	0.748	7 110	22.9	2.09	1.26	39.3	2.45	1.12
795	0.743	7 155	23.1	2.08	1.26	39.0	2.44	1.11
800	0.738	7 200	23.2	2.07	1.25	38.8	2.42	1.11

( *Continued* )

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIET	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_{cc}$ )	( $T_d$ )	( $T_g$ )	( $N_{sL}$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_{wW}$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
805	0.734	7 245	23.4	2.05	1.24	38.5	2.41	1.10
810	0.729	7 290	23.5	2.04	1.23	38.3	2.39	1.09
815	0.725	7 335	23.7	2.03	1.23	38.0	2.38	1.09
820	0.720	7 380	23.8	2.02	1.22	37.8	2.36	1.08
825	0.716	7 425	23.9	2.00	1.21	37.6	2.35	1.07
830	0.711	7 470	24.1	1.99	1.20	37.4	2.33	1.07
835	0.707	7 515	24.2	1.98	1.20	37.1	2.32	1.06
840	0.703	7 560	24.4	1.97	1.19	36.9	2.31	1.05
845	0.699	7 605	24.5	1.96	1.18	36.7	2.29	1.05
850	0.695	7 650	24.7	1.95	1.18	36.5	2.28	1.04
855	0.691	7 695	24.8	1.93	1.17	36.3	2.27	1.04
860	0.687	7 740	25.0	1.92	1.16	36.0	2.25	1.03
865	0.683	7 785	25.1	1.91	1.16	35.8	2.24	1.02
870	0.679	7 830	25.3	1.90	1.15	35.6	2.23	1.02
875	0.675	7 875	25.4	1.89	1.14	35.4	2.21	1.01
880	0.671	7 920	25.5	1.88	1.14	35.2	2.20	1.01
885	0.667	7 965	25.7	1.87	1.13	35.0	2.19	1.00
890	0.664	8 010	25.8	1.86	1.12	34.8	2.18	1.00
895	0.660	8 055	26.0	1.85	1.12	34.6	2.17	0.989
900	0.656	8 100	26.1	1.84	1.11	34.4	2.15	0.984
905	0.652	8 145	26.3	1.83	1.10	34.3	2.14	0.979
910	0.649	8 190	26.4	1.82	1.10	34.1	2.13	0.973
915	0.645	8 235	26.6	1.81	1.09	33.9	2.12	0.968
920	0.642	8 280	26.7	1.80	1.09	33.7	2.11	0.963
925	0.638	8 325	26.9	1.79	1.08	33.5	2.09	0.958
930	0.635	8 370	27.0	1.78	1.08	33.3	2.08	0.952
935	0.632	8 415	27.1	1.77	1.07	33.2	2.07	0.947
940	0.628	8 460	27.3	1.76	1.06	33.0	2.06	0.942
945	0.625	8 505	27.4	1.75	1.06	32.8	2.05	0.937
950	0.622	8 550	27.6	1.74	1.05	32.6	2.04	0.932
955	0.618	8 595	27.7	1.73	1.05	32.5	2.03	0.928
960	0.615	8 640	27.9	1.72	1.04	32.3	2.02	0.923
965	0.612	8 685	28.0	1.71	1.04	32.1	2.01	0.918
970	0.609	8 730	28.2	1.70	1.03	32.0	2.00	0.913
975	0.606	8 775	28.3	1.70	1.03	31.8	1.99	0.909
980	0.603	8 820	28.4	1.69	1.02	31.6	1.98	0.904
985	0.599	8 865	28.6	1.68	1.02	31.5	1.97	0.899
990	0.597	8 910	28.7	1.67	1.01	31.3	1.96	0.895
995	0.594	8 955	28.9	1.66	1.01	31.2	1.95	0.890
1 000	0.591	9 000	29.0	1.65	1.00	31.0	1.94	0.886

(Continued)



TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_c$ )	( $N_c$ )	( $T_d$ )	( $T_g$ )	( $N_L$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_w$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 010	0.585	9 090	29.3	1.64	0.990	30.7	1.92	0.877
1 020	0.579	9 180	29.6	1.62	0.980	30.4	1.90	0.868
1 030	0.573	9 270	29.9	1.61	0.971	30.1	1.88	0.860
1 040	0.568	9 360	30.2	1.60	0.962	29.8	1.86	0.852
1 050	0.562	9 450	30.5	1.58	0.952	29.5	1.85	0.844
1 060	0.557	9 540	30.8	1.56	0.943	29.2	1.83	0.836
1 070	0.552	9 630	31.1	1.55	0.935	29.0	1.81	0.828
1 080	0.547	9 720	31.4	1.53	0.926	28.7	1.79	0.820
1 090	0.542	9 810	31.6	1.52	0.917	28.4	1.78	0.813
1 100	0.537	9 900	31.9	1.50	0.909	28.2	1.76	0.805
1 110	0.532	9 990	32.2	1.49	0.901	27.9	1.75	0.798
1 120	0.527	10 080	32.5	1.48	0.893	27.7	1.73	0.791
1 130	0.522	10 170	32.8	1.46	0.885	27.4	1.72	0.784
1 140	0.518	10 260	33.1	1.45	0.877	27.2	1.70	0.777
1 150	0.514	10 350	33.4	1.44	0.870	27.0	1.69	0.770
1 160	0.509	10 440	33.7	1.43	0.862	26.7	1.67	0.764
1 170	0.505	10 530	34.0	1.41	0.855	26.5	1.66	0.758
1 180	0.500	10 620	34.3	1.40	0.847	26.3	1.64	0.751
1 190	0.496	10 710	34.5	1.39	0.840	26.0	1.63	0.744
1 200	0.492	10 800	34.8	1.38	0.833	25.8	1.62	0.738
1 210	0.488	10 890	35.1	1.37	0.826	25.6	1.60	0.732
1 220	0.484	10 980	35.4	1.36	0.820	25.4	1.59	0.727
1 230	0.480	11 070	35.7	1.34	0.813	25.2	1.58	0.720
1 240	0.476	11 160	36.0	1.33	0.806	25.0	1.56	0.714
1 250	0.472	11 250	36.3	1.32	0.800	24.8	1.55	0.709
1 260	0.469	11 340	36.6	1.31	0.794	24.6	1.54	0.703
1 270	0.465	11 430	36.9	1.30	0.787	24.4	1.53	0.697
1 280	0.461	11 520	37.2	1.29	0.781	24.2	1.51	0.692
1 290	0.458	11 610	37.4	1.28	0.775	24.0	1.50	0.687
1 300	0.454	11 700	37.7	1.27	0.769	23.8	1.49	0.681
1 310	0.451	11 790	38.0	1.26	0.763	23.7	1.48	0.676
1 320	0.447	11 880	38.3	1.25	0.758	23.5	1.47	0.671
1 330	0.444	11 970	38.6	1.24	0.752	23.3	1.46	0.666
1 340	0.441	12 060	38.9	1.23	0.746	23.1	1.45	0.661
1 350	0.437	12 150	39.2	1.22	0.741	23.0	1.44	0.656
1 360	0.434	12 240	39.5	1.22	0.735	22.8	1.43	0.651
1 370	0.431	12 330	39.8	1.21	0.730	22.6	1.41	0.647
1 380	0.428	12 420	40.1	1.20	0.725	22.5	1.40	0.642
1 390	0.425	12 510	40.4	1.19	0.719	22.3	1.39	0.637
1 400	0.422	12 600	40.6	1.18	0.714	22.1	1.38	0.633

[( *Continued* )]

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_s$ )	( $N_{cC}$ )	( $T_d$ )	( $T_g$ )	( $N_{eL}$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_{eW}$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 410	0.419	12 690	40.9	1.17	0.709	22.0	1.37	0.628
1 420	0.416	12 780	41.2	1.16	0.704	21.8	1.36	0.624
1 430	0.413	12 870	41.5	1.16	0.699	21.7	1.36	0.619
1 440	0.410	12 960	41.8	1.15	0.694	21.5	1.35	0.615
1 450	0.407	13 050	42.1	1.14	0.690	21.4	1.34	0.611
1 460	0.404	13 140	42.4	1.13	0.685	21.2	1.33	0.607
1 470	0.402	13 230	42.7	1.13	0.680	21.1	1.32	0.603
1 480	0.399	13 320	43.0	1.12	0.676	20.9	1.31	0.598
1 490	0.396	13 410	43.3	1.11	0.671	20.8	1.30	0.594
1 500	0.394	13 500	43.5	1.10	0.667	20.7	1.29	0.591
1 510	0.391	13 590	43.8	1.10	0.662	20.5	1.28	0.587
1 520	0.388	13 680	44.1	1.09	0.658	20.4	1.28	0.583
1 530	0.386	13 770	44.4	1.08	0.654	20.3	1.26	0.579
1 540	0.383	13 860	44.7	1.07	0.649	20.1	1.26	0.575
1 550	0.381	13 950	45.0	1.07	0.645	20.0	1.25	0.571
1 560	0.378	14 040	45.3	1.06	0.641	19.9	1.24	0.568
1 570	0.376	14 130	45.6	1.05	0.637	19.7	1.23	0.564
1 580	0.374	14 220	45.9	1.05	0.633	19.6	1.23	0.561
1 590	0.371	14 310	46.2	1.04	0.629	19.5	1.22	0.557
1 600	0.369	14 400	46.4	1.03	0.625	19.4	1.21	0.554
1 610	0.367	14 490	46.7	1.03	0.621	19.3	1.20	0.550
1 620	0.364	14 580	47.0	1.02	0.617	19.1	1.20	0.547
1 630	0.362	14 670	47.3	1.01	0.613	19.0	1.19	0.543
1 640	0.360	14 760	47.6	1.01	0.610	18.9	1.18	0.540
1 650	0.358	14 850	47.9	1.00	0.606	18.8	1.17	0.537
1 660	0.356	14 940	48.2	0.996	0.602	18.7	1.17	0.534
1 670	0.354	15 030	48.5	0.990	0.599	18.6	1.16	0.530
1 680	0.351	15 120	48.8	0.985	0.595	18.5	1.15	0.527
1 690	0.349	15 210	49.1	0.979	0.592	18.3	1.15	0.524
1 700	0.347	15 300	49.4	0.973	0.588	18.2	1.14	0.521
1 710	0.345	15 390	49.6	0.967	0.585	18.1	1.13	0.518
1 720	0.343	15 480	49.9	0.962	0.581	18.0	1.13	0.515
1 730	0.341	15 570	50.2	0.956	0.578	17.9	1.12	0.512
1 740	0.339	15 660	50.5	0.951	0.575	17.8	1.11	0.509
1 750	0.337	15 750	50.8	0.945	0.571	17.7	1.11	0.506
1 760	0.336	15 840	51.1	0.940	0.568	17.6	1.10	0.503
1 770	0.334	15 930	51.4	0.934	0.565	17.5	1.09	0.500
1 780	0.332	16 020	51.7	0.929	0.562	17.4	1.09	0.498
1 790	0.330	16 110	52.0	0.924	0.559	17.3	1.08	0.495
1 800	0.328	16 200	52.3	0.919	0.556	17.2	1.08	0.492

( Continued )

TABLE 12 TEX TO OTHER COUNT SYSTEMS — *Contd*

TEX	COTTON COUNT	DENIER	GRIST	LINEN	METRIC	WOOLLEN (DEWS- BURY)	WOOLLEN (YORK- SHIRE)	WORS- TED
( $T_t$ )	( $N_c$ )	( $T_d$ )	( $T_g$ )	( $N_L$ )	( $N_m$ )	( $N_d$ )	( $N_y$ )	( $N_w$ )
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 810	0.326	16 290	52.5	0.914	0.552	17.1	1.07	0.489
1 820	0.324	16 380	52.8	0.909	0.549	17.0	1.06	0.487
1 830	0.323	16 470	53.1	0.904	0.546	16.9	1.06	0.484
1 840	0.321	16 560	53.4	0.899	0.543	16.8	1.05	0.481
1 850	0.319	16 650	53.7	0.894	0.541	16.8	1.05	0.479
1 860	0.317	16 740	54.0	0.889	0.538	16.7	1.04	0.476
1 870	0.316	16 830	54.3	0.884	0.535	16.6	1.04	0.474
1 880	0.314	16 920	54.6	0.880	0.532	16.5	1.03	0.471
1 890	0.312	17 010	54.9	0.875	0.529	16.4	1.03	0.469
1 900	0.311	17 100	55.2	0.870	0.526	16.3	1.02	0.466
1 910	0.309	17 190	55.4	0.866	0.524	16.2	1.01	0.464
1 920	0.308	17 280	55.7	0.861	0.521	16.1	1.01	0.461
1 930	0.306	17 370	56.0	0.857	0.518	16.1	1.00	0.459
1 940	0.304	17 460	56.3	0.853	0.515	16.0	0.999	0.457
1 950	0.303	17 550	56.6	0.848	0.513	15.9	0.994	0.454
1 960	0.301	17 640	56.9	0.844	0.510	15.8	0.989	0.452
1 970	0.300	17 730	57.2	0.840	0.508	15.7	0.984	0.450
1 980	0.298	17 820	57.5	0.835	0.505	15.7	0.979	0.447
1 990	0.297	17 910	57.8	0.831	0.503	15.6	0.974	0.445
2 000	0.295	18 000	58.1	0.827	0.500	15.5	0.969	0.443

## APPENDIX A

### ( Clause 1.2 )

#### PROCEDURE FOR ROUNDING OFF ACCORDING TO ISO/R 271-1962

##### A-1. ROUNDED VALUES OF TEX

**A-1.1** When nominal counts or linear densities are converted into tex, decimal values are usually obtained, which may have to be rounded for practical purposes. To provide consistency in rounding, and for convenience during the initial stage of implementation of the Tex System, convenient rounded values have been evolved from those commonly used in the textile industry. These are listed in col 3 of Table 13. The range of exact values represented by each rounded value is also given in Table 13. The list of rounded values includes a minimum of decimals and uses even numbers as far as possible.

##### A-2. PROCEDURE TO DETERMINE ROUNDED TEX VALUES

**A-2.1** Use the following procedure to determine the rounded tex value corresponding with a yarn count or linear density expressed in any other

counting system:

- a) Determine the exact tex equivalent of the nominal count or linear density by means of the appropriate conversion factor given in Table 1 or Table 2.

*Example:*

$T_a$  150 corresponds to 16.66 tex.

- b) Find the range of values in col 1 and 2 of Table 13, which contains the tex number determined in accordance with (a) above.

*Example:*

16.66 tex is contained in the range 16.5 to 17.5.

- c) Read off the rounded tex value given in col 3 of Table 13 for the range of values selected in accordance with (b) above.

*Example:*

For the range 16.5 to 17.5, the rounded tex number is 17.

The values in Table 13 are valid for the unit tex and for its multiples and sub-multiples, including kilotex and millitex units. The scope of the table may be extended for coarser and finer linear densities by multiplying or dividing the values given by 10 or 100.

### A-3. SPECIAL CASES

**A-3.1** Where special circumstances necessitate the use of a finer grading of tex numbers than is provided by Table 13 (for example, for fine-spun cotton in the range  $<10$  tex), the rounded value may be obtained by taking the arithmetical mean of two adjacent rounded values. The value range to which this rounded value corresponds is half the relevant value range given in col 1 and 2 of Table 13.

*Example:*

Value Range		Corresponding Rounded Value*
From Over	Up to and Including	
5.9	6.1	<u>6.0</u>
6.1	6.3	<u>6.2</u>
6.3	6.5	<u>6.4</u>
6.5	6.7	<u>6.6</u>

\*Rounded values given in this table have been underlined in this example.

TABLE 13 RANGES OF VALUES IN TEX, WITH THEIR CORRESPONDING  
ROUNDED VALUE

( Clause A-1.1 )

VALUE RANGE		CORRESPONDING ROUNDED VALUE
From Over	Up to and Including	
(1)	(2)	(3)
>9.6	≤9.6	9.8
9.8	10.25	10
10.25	10.75	10.5
10.75	11.25	11
11.25	11.75	11.5
11.75	12.25	12
12.25	12.75	12.5
12.75	13.5	13
13.5	14.5	14
14.5	15.5	15
15.5	16.5	16
16.5	17.5	17
17.5	18.5	18
18.5	19.5	19
19.5	20.5	20
20.5	21.5	21
21.5	22.5	22
22.5	23.5	23
23.5	24.5	24
24.5	25.5	25
25.5	27	26
27	29	28
29	31	30
31	33	32
33	35	34
35	37	36
37	39	38
39	41	40
41	43	42
43	45	44
45	47	46
47	49	48
49	51	50
51	54	52
54	58	56
58	62	60
62	66	64
66	70	68
70	74	72
74	78	76
78	82	80
82	86	84
86	90	88
90	94	92
94	98	96
98	102.5	100
102.5	107.5	105

## APPENDIX B

( Clause 1.2 )

PROCEDURE FOR INTERMEDIATE STEPS TOWARDS  
THE ADOPTION OF TEX SYSTEMB-1. INTERMEDIATE STEPS BASED ON DRAFT ISO  
RECOMMENDATION

**B-1.1** It has been found that the adoption of rounded values ( *see* Appendix A ) is not always commercially practicable and that there may be a need in some cases for intermediate steps to facilitate the full implementation of the ISO Recommendation R 271. Draft proposal for an ISO Recommendation Additional to ISO/R 271-1962 Intermediate steps leading to the complete introduction of Second Stage of the Tex System [ Doc : ISO/TC 38 ( Sec. 274 ) 413 ], has recommended the following intermediate steps:

- a) The value, in *tex*, of the yarn count in the traditional system is calculated to three significant figures; and
- b) The value, in *tex*, is rounded further as illustrated in Table 14.

TABLE 14 INTERMEDIATE STEPS

SYSTEM	YARN COUNT IN TRADITIONAL SYSTEM	INTERMEDIATE STEP (a)  (Tex)	INTER- MEDIATE STEP (b)  (Tex)	ROUNDED VALUE ACCORDING TO ISO/R 271 (Tex)
(1)	(2)	(3)	(4)	(5)
Cotton count ( spun-rayon staple, spun silk )	N <sub>EC</sub> 12	49.2	49	50
Denier	T <sub>g</sub> 120	13.3	13	13
Worsted	N <sub>EW</sub> 18	49.2	49	50
Woollen ( Yorkshire )	N <sub>y</sub> 24	80.7	81	80
Linen ( wet spun )	N <sub>EL</sub> 25	66.1	66	68

**B-1.1.1** The adoption of intermediate step (a) or (b) or both is designed to lead to the ultimate adoption of the ISO rounded *tex* values as stipulated in ISO/R 271-1962 and illustrated in col 5 of Table 14. The intermediate step (a) may be disregarded where conditions make either step (b) or immediate adoption of ISO rounded values practicable.

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